

App. No. 09/942,360  
Amendment A  
Page 2

Amendments to the Claims

Claim 1 (Currently amended): A method of reducing power requirement of a front end device in a receiver, comprising the steps of:

measuring a received signal strength (RSS) of a signal received at an antenna;

comparing the received signal strength to a predetermined threshold; and

bypassing a filter and an amplifier in the front end if the received signal strength is greater than said predetermined threshold;

wherein said front end comprises:

a Low Noise Amplifier (LNA) having an LNA input coupled to a signal source and an LNA output,

a filter having an input coupled to the LNA output and a filter output,

an amplifier having an amplifier input coupled to the filter output and an amplifier output, and

a bypass circuit comprising a bypass switch coupled between the input of the filter and the amplifier output;

wherein said step of bypassing comprises closing the bypass switch;

wherein said predetermined threshold point comprises a minimum recognizable signal strength plus an amount of power representing error in RSS measurement and signal strength losses less an amount of amplification of the LNA.

Claim 2 (Previously presented): The method according to Claim 1, wherein said predetermined threshold is -90.5 dBm.

App. No. 09/942,360  
Amendment A  
Page 3

Claim 3 (Currently amended): The method according to Claim 1, wherein electronics coupled to an output of said front end require a minimum signal strength in order to process the signal received at the antenna, and wherein said predetermined threshold comprises said a minimum signal strength ~~capable of being processed by electronics coupled to an output of said front end~~ less a strength of amplification by a Low Noise Amplifier (LNA) of said front end.

Claim 4 (Original): The method according to Claim 1, further comprising the step of:

powering down said amplifier if the amplifier is powered up and the received signal strength is greater than said threshold.

Claims 5-6 (Canceled)

Claim 7 (Currently amended): The method according to Claim 1 6, wherein said minimum recognizable signal strength is a weakest signal capable of being processed by electronics coupled to a mixer output.

Claim 8 (Currently amended): The method according to Claim 1 6, wherein said minimum recognizable signal strength is -106 dBm.

Claim 9 (Previously presented): The method according to Claim 1, wherein:

said method is embodied in a set of computer instructions stored on a computer readable media;

said set of computer instructions, when loaded into a

App. No. 09/942,360  
Amendment A  
Page 4

computer, cause the computer to perform the steps of said method.

Claim 10 (Previously presented): The method according to Claim 9, wherein said set of computer instruction are compiled computer instructions stored as an executable program on said computer readable media.

Claim 11 (Original): The method according to Claim 1, wherein said method is embodied in a set of computer readable instructions stored in an electronic signal.

Claim 12 (Currently amended): A front end architecture, comprising:

a Low Noise Amplifier (LNA) having an LNA input and an LNA output, said LNA input coupled to a signal source, wherein the signal source corresponds to a signal received at an antenna;

a filter having an input coupled to the LNA output and a filter output;

an radio frequency (RF) amplifier having an RF amplifier input coupled to the filter output and an RF amplifier output;

a first bypass circuit coupled between the input of the filter and the RF amplifier output and configured to bypass the filter and RF amplifier; ~~and~~

a control device configured to activate and deactivate the first bypass circuit; and

a second bypass circuit coupled between the LNA input and the LNA output;

wherein said control circuit is further configured to activate and deactivate the second bypass circuit;

wherein the second bypass circuit is activated if the

App. No. 09/942,360  
Amendment A  
Page 5

received signal strength (RSS) of a received signal is greater than a first threshold, and the first bypass circuit is activated if the received signal strength (RSS) exceeds a second threshold higher than the first threshold.

Claim 13 (Previously presented): The front end according to Claim 12, wherein the first bypass circuit comprises a switch coupled between the input of the filter and the radio frequency (RF) amplifier output.

Claim 14 (Previously presented): The front end according to Claim 13, wherein said switch is a Single Pole Single Throw.

Claim 15 (Original): The front end according to claim 13, wherein said switch is a transistor.

Claim 16 (Previously presented): The front end according to Claim 12, further comprising:

a signal detector coupled to said signal source and configured to determine a received signal strength (RSS) of a signal from said signal source;

wherein said control device is further configured to activate and deactivate the first bypass circuit according to the RSS of the signal from said signal source.

Claims 17-18 (Canceled)

Claim 19 (Currently amended): The front end architecture according to Claim ~~12~~ 19, wherein the first bypass circuit is activated if a received signal strength (RSS) of a received

App. No. 09/942,360  
Amendment A  
Page 6

signal is greater than a first threshold, and the second bypass circuit is activated if the RSSI exceeds a second threshold.

Claim 20 (Original): The front end device according to Claim 19, wherein the second threshold is higher than the first threshold.

Claim 21 (Canceled)

Claim 22 (Previously presented): A front end device, comprising:

means for measuring a received signal strength (RSS) of a signal received at an antenna;

means for comparing the received signal strength to a first predetermined threshold; and

means for bypassing a filter and an amplifier in the front end if the received signal strength is greater than said first predetermined threshold; and

means for bypassing a low noise amplifier if the received signal strength exceeds a second predetermined threshold that is higher than the first predetermined threshold.

Claim 23 (Original): The front end device according to Claim 22, wherein said means for comparing comprises:

a computing means coupled to said means for measuring and said means for bypassing.

Claim 24 (Canceled)

Claim 25 (Currently amended): The front end according to

App. No. 09/942,360  
Amendment A  
Page 7

Claim 22, further comprising:

a means for low noise amplification (LNA) coupled to a  
signal source;

a filter means coupled to an output of the LNA; and

an amplifier means coupled to an output of the filter means;

wherein said means for bypassing is coupled to an input of  
the filter means and an output of the amplifier means.